

REMARKS

Applicants thank the Examiner for the thorough consideration given the present Application. Claims 1 and 3-9 are pending in the present application. Claim 1 is an independent claim. Claim 1 is amended, claim 9 is added, and claim 2 is cancelled by this response.

Examiner Interview

Applicants' representative conducted a telephone interview with the Examiner on September 24, 2008. During this interview, the Examiner conceded that claim 3 was allowable subject matter. The Examiner stated that her concern regarding the allowability of claims 1 and 2 centered around concerns regarding what she perceived as functional aspects of the claim language.

Applicants' representative and Examiner discussed this issue and agreed, in principle, that recasting accessibility aspect of the power dispenser in terms of structure would define the present invention over the presently applied references. Applicants hereby present amendments to independent claim 1 consistent with the structural limitations suggested by the Examiner and also incorporating the limitations of claim 2 into independent claim 1.

Claim Rejections – 35 U.S.C. § 102 - Feygin

Claims 1-3 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,637,175 to Feygin et al. (hereafter "Feygin"). Insofar as it pertains to the presently pending claims, this rejection is respectfully traversed.

Feygin teaches a system and method of laminated object manufacturing (LOM) that fuses powdered material into successive, contoured layers of an object, allowing for the rapid manufacturing of complex, contoured objects. (Col. 5, lines 20-50).

Claim 1

As amended, independent claim 1 describes an LOM manufacturing system where “the powder dispenser is a continuous unit having a dispensing end and a powder refill end, where the dispensing end is disposed inside said casing and the powder refill end is disposed outside said casing such that a powder refill opening on the refill end is exposed to an ambient atmosphere outside said casing and such that the powder dispenser is thereby directly accessible from outside the casing for refill of powder material at any time during a production process without affecting pressure conditions inside the casing.”

While Feygin does disclose a recycling pipe that feeds unused powder back into the powder dispenser during production (Fig. 2; Col. 23, lines 35-42), Feygin does not teach or suggest that additional powder may be introduced into the system from outside the pressure-controlled environment without negatively impacting or halting the production process. Specifically, such an introduction of material in the case of Feygin is only possible by dismantling Feygin’s apparatus. Applicants therefore submit that Feygin does not teach or suggest that “the powder dispenser is a continuous unit having a dispensing end and a powder refill end, where the dispensing end is disposed inside said casing and the powder refill end is disposed outside said casing such that a powder refill opening on the refill end is exposed to an ambient atmosphere outside said casing and such that the powder dispenser is thereby directly accessible from outside the casing for refill of powder material at any time during a production process without affecting pressure conditions inside the casing” as required by independent claim 1.

Claim 3

Applicants respectfully submit that claim 3 is allowable at least by virtue of its dependency from independent claim 1. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Claim Rejections – 35 U.S.C. § 102 – Forderhase

Claims 1, 2, and 5-7 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,252,264 to Forderhase et al. (hereafter “Forderhase”). Insofar as it pertains to the presently pending claims, this rejection is respectfully traversed.

Forderhase teaches an LOM manufacturing system that employs multiple powder cartridges to accelerate production processing by enabling cartridge exchange during production. (Col. 11, lines 1-14). Forderhase requires that the chamber be sealed to isolate it from the outside environment during cartridge exchange. Processing may continue from an installed, non-empty cartridge while a new cartridge is installed and made accessible to the powder piston assembly inside the chamber. (Col. 12, lines 20-40).

Claim 1

As amended, independent claim 1 describes an LOM manufacturing system where “the powder dispenser is a continuous unit having a dispensing end and a powder refill end, where the dispensing end is disposed inside said casing and the powder refill end is disposed outside said casing such that a powder refill opening on the refill end is exposed to an ambient atmosphere outside said casing and such that the powder dispenser is thereby directly accessible from outside the casing for refill of powder material at any time during a production process without affecting pressure conditions inside the casing.”

While Forderhase discloses a system whereby additional powder may be introduced into the chamber during a production process, Forderhase requires that the chamber be sealed and the powder delivery portion being refilled be deactivated while its associated cartridge is removed, refilled, and replaced. (Col. 11, line 38-40; Col. 12, lines 21-29). Applicants respectfully submit that this is a very different teaching than direct access to an operating powder dispenser from outside the casing. Components of Forderhase’s system may be sealed off from the casing and thereby removed or attached during production, but no component of Forderhase’s powder delivery system is directly accessible from outside the casing during a production process. Forderhase’s powder delivery and refill system is not “a continuous unit having a dispensing end

and a powder refill end, where the dispensing end is disposed inside said casing and the powder refill end is disposed outside said casing.” Quite to the contrary, the powder refill portion of Forderhase is a wholly separate device from the powder dispensing unit, and is sealed off and detached from the casing before becoming accessible. Applicants therefore respectfully submit that the powder refill operation of Forderhase does teach or suggest that “the powder dispenser is a continuous unit having a dispensing end and a powder refill end, where the dispensing end is disposed inside said casing and the powder refill end is disposed outside said casing such that a powder refill opening on the refill end is exposed to an ambient atmosphere outside said casing and such that the powder dispenser is thereby directly accessible from outside the casing for refill of powder material at any time during a production process without affecting pressure conditions inside the casing” as required by independent claim 1.

Claims 5-7

Applicants respectfully submit that claims 5-7 are allowable at least by virtue of their dependency from independent claim 1. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Claim Rejections – 35 U.S.C. § 103 - Feygin

Claim 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Feygin. Insofar as it pertains to the presently pending claim, this rejection is respectfully traversed.

Applicants respectfully submit that claim 4 is allowable at least by virtue of its dependency from independent claim 1. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Claim Rejections – 35 U.S.C. § 103 - Andersson

Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Feygin or Forderhase in view of U.S. Patent Publication 2004/0026807 to Andersson (“Andersson”). Insofar as it pertains to the presently pending claim, this rejection is respectfully traversed.

Applicants respectfully submit that claim 8 is allowable at least by virtue of its dependency from independent claim 1. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Conclusion

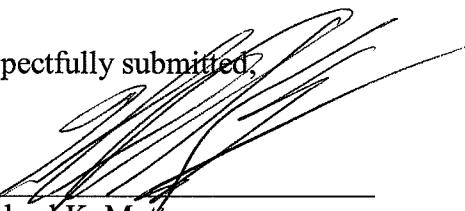
For at least the foregoing amendments and remarks, Applicants respectfully submit that all pending claims are allowable.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Naphtali Y. Matlis, (Reg. No. 61,592), at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§ 1.16 or 1.14; particularly, extension of time fees.

Dated: **October 28, 2008**

Respectfully submitted,

By 
Michael K. Mutter
Registration No.: 29,680
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Rd
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicants